The Red Cross Seal



BY S. E. KISER.

I'm little, but I travel far, My mission is to lessen grief. To search among the plagues that are And banish from the world their

However poor you chance to be, Or young or old, or weak or strong, Your servant I will gladly be, So that you, too, may help along.

- I help to rid the world of dread. To darkened places I give light: I lift up many a wearied head, I am a watchman in the night.
- I bring a message of good cheer, I preach the creed of brotherhood: I show the way and make it clear, My object is the common good.
- I lift the fallen, aid the weak. I watch beside the infant's cot; I bring the color to his cheek Who languishes where hope is not.
- I swing the gates of gloom ajar, I help to make the future bright: I'm little, but I travel far: I am a watchman in the night.

The Newhouse Tunnel.

For years the mining world has been interested in the driving of the Newhouse tunnel at Idaho Springs, Colorado. At times, as the work dragged the Statesman, of Boise, says: along, the final outcome was a matter of doubt, although it had been earnestly believed that this great bore would eventually provide an avenue through which large ore bodies could be economically and profitably worked at depths far below the original water demonstrated that the advantages to be derived from the tunnel were no idle dreams, and realization is proving to be of more far-reaching importance than were expectations, as splendid which could not possibly be touched were it not for the existence of the tunnel.

In speaking of this mammoth enter-Springs, says:

scope of business that will be realized townsite stood. within the next few years can cow tance of 600 feet and which is now be- the water will become deeper. ing stulled for stoping. An equally been demonstrated by the prepara- drain the water off to make it fit for tions of White and Van Tilborg. This habitation.-Salt Lake Mining Review. latter strike will become a great producer within a few months in which the ore shoot will be drifted and stulled. Parties are planning to do some new conditions in the tunnel.

This splendid development is in no

policies of the management. Affairs waiting is nearly at an end.

A Mining Town Under Water.

A few years ago the mining exciteand thousands of prospectors, miners and investors braved the snow and the touched. storm to get into the new Eldorado. For quite awhile the district flourished, claims were developed and improved, and quite a town, called Roosevelt, was built in the little flat below the mineral zone. For some reason, however. Thunder Mountain has never properties and mills were constructed, cally abandoned. For the last few years but little has been heard regardhave slipped from memory but for the disaster which has overtaken the little

Roosevelt, the principal town in the Thunder Mountain district in central tions, c vering Grand River and trib-Idaho in 1912, today is covered by a lake 600 yards in length and 200 yards tributaries in Utah, Colorado, and in ridth, and of an average depth of Wyoming; the San Juan basin in twenty-five feet. It was the scene of a northwestern New Mexico; the Little gold strike nine years ago, and thouslevels. Now, however, it is being ands braved the hardships and hazards basin in Arizona; and finally the disof the trail. It proved a disappoint charge near the mouth of the main ment, though much pay ore was de- stream at Yuma, Ariz. These records veloped nearby.

The circumstance which wiped the town of Roosevelt from the map was an international significance in connecore reserves are now being worked peculiar. It resulted from a landslide tion with the difficulties that have two years ago, starting near the source of Mule creek, a mile and a Colorado near its mouth in Mexican half from the settlement. The great territory. The escape of the river avalanche of earth and stone ploughed from its regular channel and its diverprise the Mining Gazette, of Idaho its way through a virgin forest with a sion into the Salton Sea are matters of roar that was heard for miles. Mining in the Newhouse tunnel is in Twenty-six hours after the break oca more promising condition at this curred the mass stopped abruptly ed to inundate some of the most fertile time than it has ever before been and across the lower part of the town, the winter will show a big develop- forming a dam for Monument creek, ment of tributary business, while the which now formed a lake where the

There were few residents in the begin to be comprehended. The prestown at the time of the slide, and all tributary flow, even in the high reent prospect is founded upon the great escaped with their possessions, owing gions of its headwaters, in Colorado, ore bodies which have been developed to the slowness of the avalanche. A In the last two years in lateral explor- log schoolhouse and two cabins, out of ations and which now are in shape for its path, now stand as silent sentinels heavy and continued production. The to mark the vanished town. The most substantial of these is the im- buildings are situated above the water mense ore body in the Dyke lode line, and as the lake has risen to a which the lateral penetrated for a dis- point that it has an outlet, is not likely

Roosevelt camp today is deserted. satisfactory condition exists in the the residents having moved to other Prize lode where a great ore body has holdings. The mines are closed and been explored and prepared for min- the prospectors and miners have ing on a large scale. The output of sought newer and more promising the Schaffer lease in the Gem is grow- fields in the tributary country, which ing from month to month and it is is rich in mineral resources. It is confidently anticipated that it will hardly probable that the camp ever continue to the surface, 1,100 feet will be resurrected, as it is isolated above, as its continuation downward and off the line of transportation, beover 1,000 feet to the tunnel level has sides which it would take a fortune to

The Colorado River Basin.

There is no more interesting river heavy development in the levels above in the world than the Colorado. Into open this ore shoot also, together dustrially, scenically, and geologically with the stand and regular output of it presents more diverse conditions the Saratoga, Sun and Moon and King than any other stream in the United Bee make a volume of business in im- States. From the crest of the Rocky dredged. This is the pioneer district mediate anticipation that will establish Mountains in Colorado and Wyoming of the modern bucket-elevator dredge, it sweeps across the intervening country, traversing parts of Utah, New number and output of its gold boats. small measure due to the more liberal Mexico, Arizona, and Nevada, to the In the earlier days the operators not policy now ruling in the tunnel manhead of the Gulf of California, the only passed over areas which were not

an encouragement they did not feel square miles. In the Rocky Mountain ed losses in the tailings which are with big roomy seats, perfect ventilaformerly. The response to these new region it flows through a country cos- now considered very high. In some tion and electric lights. Standard terms has been rapid and we feel is a cred by eternal snows and waters some cases the losses are said to have Pullman sleeping cars with individual justification of Gazette's contention of the most fertile and valuable agri- amounted to 20 per cent of the gold electric berth lights and electric fans. that all mining operations can be and cultural lands in the world in western content, while at present the average Tourist sleeping cars of latest pattern are stimulated or depressed by the Colorado, northwestern New Mexico, is not over 10 per cent and, under the with electric lights and all meals are of the magnitude of mining operations famous Grand Canyon of the Colorado per cent. Under the rapid progress West know that means "the best". are necessarily sluggish as the break- in the northern part of Arizona and that has been made during the last ing of avenues through hard ground finally passes over the broad, flat eight years costs of operation have finest portions of Oklahoma and Mismust invariably precede realization of plains above the head of the Gulf of been reduced in some instances to as souri and is going to be just what is expectations, and this has been not California. In this lower-most portion little as 1.5 cents a cubic yard of needed to attract travel to New ably true of the development of busi- the river strongly resembles the Nile, gravel. It is considered that the Mexico and Arizona. ness in the Newhouse tunnel, but it having annual floods which distribute steady improvement will eventually now appears that the long period of silt over the adjoining lands and ren- bring the cost figure down to 1 cent a der them as tertile as those in the his- yard. toric valley of North Africa. The Colorado and its tributaries have other duction costs of a given dredge, handment of the west was centered in the sent abundant opportunities for the de- the two factors corresponding to a Thunder Mountain district in central velopment of water power. Power working cost of 1 cent a yard and a side the concentrator, may be gained Idaho. The big rush to the new dis- has been developed at a few points, gravel yield of 2 cents. Such a 2-cent from the information received by the covery was on in the dead of winter, but the resources of the Colorado basin yield is roughly equivalent to a former are in this respect yet practically un- loss in tailings of 20 per cent on a 10-

tion of the river, to ascertain the so that future developments, as well as latively young industry. made good. Extensive development those now under construction, can be ments at many important points in the Colorado basin, and the latest publishing Thunder Mountain, and it might ed information on the subject is conthe Survey, which is a progress report | ion. - Denver Mining Science. town of Roosevelt, considering which of river-flow measurements in this basin for the year 1909. In this report are recorded observations at 179 stautaries in Colorado; Green River and Colorado River basin in the Gila River are not only of local value for guiding economic development, but they have been encountered in the control of the recent history, and the consquences of a diversion of this kind, which promiscontro in southern California have been discussed in the public press.

The control of the Colorado for the prevention of further outbreaks must involve thorough knowledge of the and the ultimate steps taken to prevent disastrous inundation will in all probability involve the control of these upland tributaries.

The size of the Colorado River is indicated by its total discharge in the year 1909, which was 26,000,000 acrefeet, or enough water to cover that number of acres to a depth of I foot. Such an amount of water, if poured upon Manhattan Borough of the City of New York and confined by retaining Frisco Lines, showing the daily new walls, would bury the city 1,857 feet deep, or it would make a lake 66 feet deep over the State of Delaware.

A copy of Water Supply Paper 269 may be obtained on application to the Director of the Geological Survey, at Washington, D. C.

Gold Dredging Costs.

An interesting prediction is reported from California in the form of a statement by Newton Cleaveland, gen eral manager of the Natomas Consolidated of California, the largest dredging concern in the West. The prediction is that at no distant date the old and it still holds first rank for the agement which has given to operators area drained being about 300,000 then considered profitable, but endur- modern in every particular; coaches

and eastern Utah. It traverses the most careful management, as low as 5 served by Fred Harvey, and we of the

If we revert to a time when the provalues than that of irrigation, for, de- ling 14-cent gravel, where Teents a the American Smelting & Refining scending in steep channels, they pre- cubic yard, we find a relation between company is now engaged in the erreccent gravel considered too low grade In a basin so liberally provided with for profit. Thegreat accumulations natural resources it is a fundamental of tailings and the rejected areas in These are declared to be mere incinecessity, in planning for the utiliza- the Oroville field are still there, with early possibility of redredging. This amount of water available in the main is what a few years of gold dredge stream and its principal tributaries, engineering have done for this re-

A few years ago it would have seemwork was performed on a number of suitably designed in type and capacity, ed almost, inconceivable for such low For a long period of years the United records of costs to be made as are now but no dividends were ever recorded. States Geological Survey has been credited to the larger dredges of Caland gradually the district was practi- making observations and measure ifornia. Corresponding immensity of operations in the sphere of ore milling. while producing some surprising results, has not recorded such a swift tained in Water-Supply Paper 269 of increase in the economies of product-

The Rich Mr. Bungalower.

"The babitats of this kind of millionaire" says Eleanor Gates, writing of Pasadena in Sunset Magazine for December, "are the bungalows-those aests of comfort for stown harried Easterners, those lures to the romatic, those snares of bachelor-men and maids. In building the bungalows, Pasadena uses every possible combination of brick and concrete, rubble and shingle and stain to get effects. And no two are alike, but all are adorably cunning and homey and inviting. So that the owner of one actually does not envy this real millionaire in his class to Civil Engineering of the great white pillared mansion, or that University of Arizona on an inspection other one with an acre of vine-screen-

doesn't worry about having a few hun. engineer has been secured, and on this dred thousand more or less. There trip the problems and their solutions are so many things he doesn't have to in civil engineering will be explained pay out for: drug bills, doctor bills, to the students. It is anticipated that fuel bills, bills for woolen clothing; this opportunity will be a valuable traveling expenses to take him from supplement to the class work. home in the summer-when it's too hot or in the winter-when it's too cold; cause of graft conditions. **

A New Train Across

the Continent.

"A Straight Line Across the Continent" is the title of a handsome eight page circular issued by the and superior service between Los Angeles and San Francisco on the west and St. Louis, Memphis and Birmingham on the east, inaugurated by the Santa Fe Lines on Nov. 12th, in conpection with the Frisco Lines, using the Santa Fe Lines via Albuquerque, Belen, Clovia and Amarillo to Waynoka, Okla., thence Frisco Lines to the East and Southwest. It is just such service which will best serve California, Arizona and New Mexico inhabitants on their trips east and will assist us largely in the immigration movement to the states above mentioned, and also thoroughly serve the tourist.

It is a brand new Low-Altitude Route to the East and Southeast, over a thoroughly ballasted line and will be appreciated by passengers who find the higher altitudes so disagreeable.

The equipment in this service is

The line passes through some of the

Great Smelter.

Some idea of the magnitude of the work in progress at Hayden, where tion of a great smelting plant, along-Arizona Eastern that in four items alone shipments of material to the smelter site amount to 350 cars, among which are 8,000,000 pounds of steel. dental items in the construction of the

The big smelter, upon which nearly 1000 men are now employed as a construction gang, will not be completed until next May. Every day there comes to Tempe from Maricopa from ten to fifteen gars of material which are then sent on to Hayden.

Upon the occasion of the last visit to this city of General Superintendent Cole announcement was made here that the American Smelting & Refining company could easily place another thousand men at work in the actual work of construction if that number were available.

Incidentally, the Arizona Eastern will probably soon be in the market for laborers when it begins the erection of its new depot, its round house, four residences and a freight house, There is also considerable trackage work to be done. When all this is completed it is predicted that Hayden will experience a material growth in population.-Phoesix Gazette.

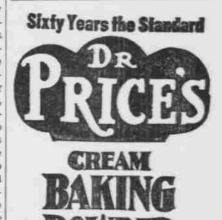
Civil Engineering Trip.

Prof. Waterbury will conduct the trip over the El Paso & Southwestern Railway during the Thanksgiving va-"As a matter of fact, the bungalower cation. The permission of the chief

When your feet are wet and cold, bills for tuition, literature, bottled and your body chilled through and water, mittens, fors, heavy taxes to through from exposure, take a big keep up a large police force; bills to dose of Chamberlain's Cough Remedy, meet the yearly damages of summer bathe your feet in hot water before or winter storms, exorbitant bills be- going to bed, and you are almost certain to ward off a severe cold. For sale by all dealers.

Wanted.

I 2 stamp Joshua Hendry 3 discharge hattery,1000 lb. stamps. Address MIN-ER office, Kingman, Arizona.



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